

Page



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/800,219	03/05/2001	Srinivas Gutta	US010050 (834-53)	3342

24737 7590 08/28/2003

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER

BONSHOCK, DENNIS G

ART UNIT	PAPER NUMBER
----------	--------------

2173

DATE MAILED: 08/28/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/800,219

Applicant(s)

GUTTA ET AL.

Examiner

Dennis G Bonshock

Art Unit

2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3, 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. The corrected or substitute drawings were received on Aug. 12, 2002. These drawings are acceptable for examination.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "52" has been used to designate a stepper motor (page 7 line 1), a control unit (page 7, line 5), and a camera (page 9, line 12). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 16 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Mizuno, Patent # JP 406141309. With regards to claim 16, which teaches that there is a video display screen, which comprises an audio capturing device, the use of speech recognition software, and adjusting the display screen based on audio commands. Mizuno teaches a voice communication terminal equipped with a image display means,

the direction of which is changed based on vocal sampling through 2 audio capturing devices (see column 2, line 18). With regards to claim 17, which teaches that one or more audio commands are correlated to movement. Mizuno teaches the use of voice commands to move a display device (see column 2, line 18).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeong, Patent # 6,348,928 and Lyons et al., Patent # 6,176,782, hereinafter Lyons.

With regard to claim 1, Jeong teaches a video display screen that automatically pivots to face the user (see column 1, line 35), and measures the position of the user (see column 1, line 62). Jeong, however, doesn't teach the use of an image capturing device, or image recognition software. Lyons teaches a motion-based display similar to that of Jeong, but further teaches the use of camera for taking an image of the user (see column 1, line 22), and a vision recognition part (see column 4, page 50). It would have been obvious to one of ordinary skill in the art, having the teachings of Jeong and Lyons before him at the time the invention was made to modify the automatic rotating visual display of Jeong to include the ability to judge the location of the viewers via a visual recognition system, of Lyons. One would have been motivated to make such a

combination because a vision recognition system can function in some environments where the use of a heat sensing system would be unusable.

7. With regard to claim 2, and in reference to what was previously rejected in claim 1, Lyons further teaches that the display could be projection compatible. In column 1, line 35, Lyons teaches that the system is arranged to compare the camera-recorded image with the original image fed to the projector.

8. With regard to claim 3, and in reference to what was previously rejected in claim 1, Jeong further teaches that the display screen can be a screen in a home theater system. In column 1, line 6, Jeong teaches the automatic rotation of a TV stand.

9. With regard to claim 4, and in reference to what was previously rejected in claim 1, Jeong further teaches that the display adjusts so that the normal to the display screen faces the user. In column 1, line 62, Jeong teaches that the central axis of the display screen of the visual display unit be placed at the center of the discriminated angle.

10. With regard to claim 5, and in reference to what was previously rejected in claim 4, Lyons further teaches that there be a measurement based on the pose of the users face. In column 8, line 28, Lyons teaches that the use of the position of the eye (which is given offset from the head portion) and the hand to find what a gesture is referring to.

11. With regard to claims 6 and 7, and in reference to what was previously rejected in claim 5, Jeong further teaches that there is a measurement of an angular displacement of the user with respect to the reference axis and that the control unit rotates the display screen the normal vector to the display screen has the angular displacement of the user with respect to the reference axis. In column 1, line 62, Jeong

teaches performing an arithmetic operation so as the central axis of the display screen of the visual display unit be placed at the center of the discriminated angle, and then rotating the display screen of the visual display unit according to the result of the arithmetic operation.

12. With regard to claim 8, and in reference to what was previously rejected in claim 4, Lyons further teaches that there is a measurement determined by the position of the user in and image, by image recognition software. In column 4, lines 50-44, Lyons teaches that the vision recognition part determines the current pose of the user and calculates the position of the pointing hand of the user (this could not be done without the use of some image recognition software).

13. With regard to claim 9, and in reference to what was previously rejected in claim 8, Jeong further teaches that there be a measurement that is an angular displacement of the user with respect to a reference axis. In column 1, line 62, Jeong teaches performing an arithmetic operation so as the central axis of the display screen of the visual display unit be placed at the center of the discriminated angle, and then rotating the display screen of the visual display unit according to the result of the arithmetic operation.

14. With regard to claim 10, and in reference to what was previously rejected in claim 9, Jeong further teaches that there is a control unit that rotates the display so that the normal vector has an angular displacement of the user with respect to the reference axis. In column 1, line 62, Jeong teaches performing an arithmetic operation so as the central axis of the display screen of the visual display unit be placed at the center of the

discriminated angle, and then rotating the display screen of the visual display unit according to the result of the arithmetic operation.

15. With regard to claim 11, and in reference to what was previously rejected in claim 1, Jeong further teaches that the control unit identifies two of more users and records their average position. In column 4, line 10, Jeong teaches sensing the position of both viewers and then making maximum angle there between.

16. With regard to claim 12, and in reference to what was previously rejected in claim 11, Jeong further teaches rotating the screen to face the two of more users recorded average position. In column 4, line 10, Jeong teaches sensing the position of both viewers and then making maximum angle there between, and in column 1, line 36, rotating the screen accordingly.

17. With regard to claim 13, Jeong teaches a video display screen that automatically pivots to face the user (see column 1, line 35). Jeong, however, doesn't teach the use of an image-capturing device, image recognition software, or adjusting the orientation of the display screen based upon the identified gesture of the user in the image. Lyons teaches a motion-based display similar to that of Jeong, but further teaches the use of camera for taking an image of the user (see column 1, line 22), a vision recognition part (see column 4, page 50), and the ability for the system to react to the user giving a gesture (see column 1, line 10). With regard to the image capturing means: It would have been obvious to one of ordinary skill in the art, having the teachings of Jeong and Lyons before him at the time the invention was made to modify the automatic rotating visual display of Jeong to include the ability to judge the location of the viewers via a

visual recognition system. One would have been motivated to make such a combination because a vision recognition system can function in some environments where the use of a heat sensing system would be unusable. With regard to the ability to capture gestures: It would have been obvious to one of ordinary skill in the art, having the teachings of Jeong and Lyons before him at the time the invention was made to modify the automatic rotating visual display of Jeong to include gesture recognition of Lyons. One would have been motivated to make such a combination because this would allow the user to select somewhere other than him self as a place to focus the video.

18. With regard to claim 14, and in reference to what was previously rejected in claim 13, Lyons further teaches that one or more gestures are hand gestures. In column 1, line 10, Lyons teaches allowing the user to physically point to perform an action.

19. With regard to claim 15, and in reference to what was previously rejected in claim 14, Lyons further teaches that each hand gesture is correlated to a movement. In column 5, line 15, Lyons teaches the use of a specific hand gesture corresponding to a particular operation.

Conclusion

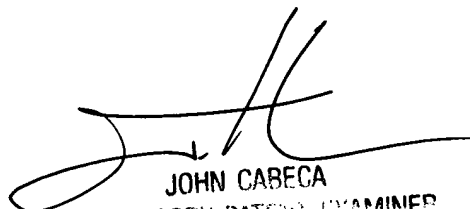
20. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach a display device that automatically adjusts to face the person or persons viewing it.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis G Bonshock whose telephone number is (703) 305-4668. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

22. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (703) 308-3116. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

23. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

dgb
August 21, 2003



JOHN CABECA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER